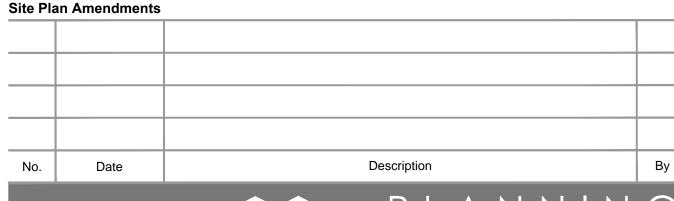


### Legal Description

RP 16R9097 PART 1, NORTH PART LOT 6, CONCESSION 4 TOWN OF THE BLUE MOUNTAINS, COUNTY OF GREY

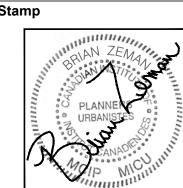
## Legend

Niagara Escarpment Boundary of Area to be Licenced Plan Area Pretty River Valley Provincial Park Limit of Extraction All Setbacks are Drawn to Scale & Show Labelled Distances Existing Licence — — Property Line Boundary Licence Reference No. 5057 & 4945 Existing Fence X X Post and Wire Farm Fence Unless Otherwise Noted Existing Extraction Paved Road Existing Vegetation Hydro Pole **Bobolink Habitat** Shed Structure Significant Woodland & **Elevation Contour** Significant Wildlife Habitat Metres Above Mean Sea Level Spot Elevation ANSI (Earth Science) Surface Water Significant Woodland, Drainage Significant Wildlife Habitat & ANSI (Earth Science) Butternut Tree Retainable **Bobolink Habitat** Butternut Tree & ANSI (Earth Science) Non-Retainable Field / Service Entrance **Cross-Sections** Maintained and regulated by a gate which will be closed at all times the pit is not in operation. It is not to be used for haul trucks.





MNRF Approval Stamp





Project

# **CONN PIT EXTENSION**

2223117 ONTARIO INC. 1443 HURONTARIO STREET MISSISSAUGA, ONTARIO, L5G 3H5

MNF	RF Licen	ce Referer	nce No.			ion to MNRF,	December 23, 2015 RF, January 22, 2016
Plan	Scale 1	:1500 (Arc	,		Plot Scale	1:1 (	Arch D)
			Metres		Drawn By	M.M.	File No.
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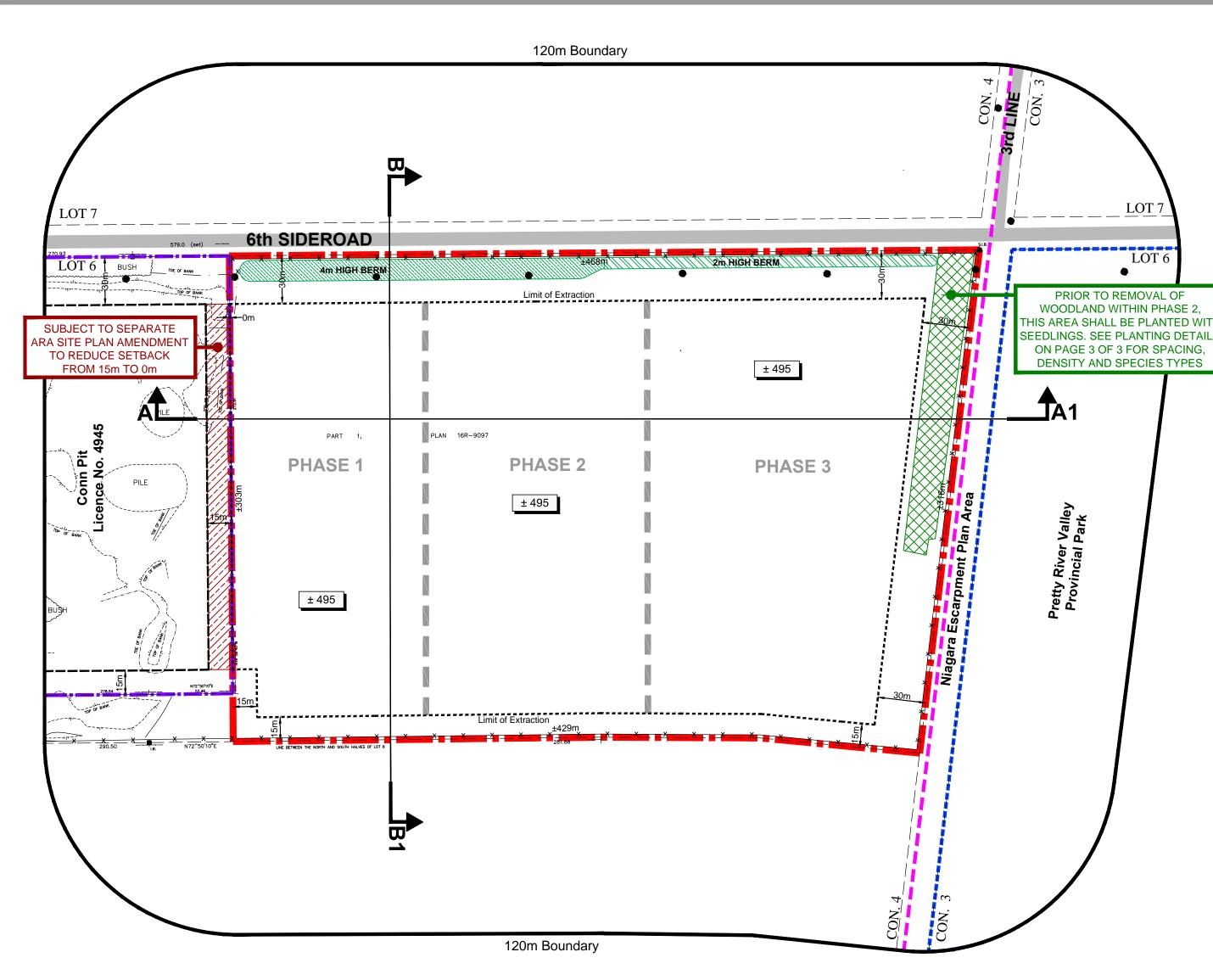
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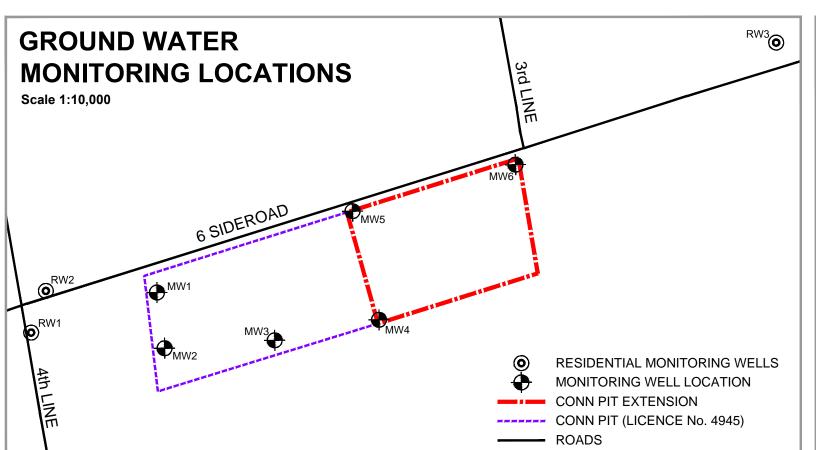
**EXISTING FEATURES** 

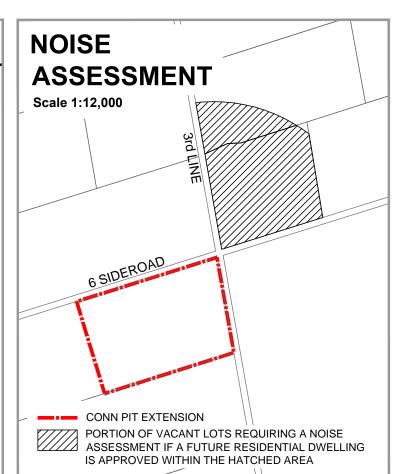
Drawing No. 1 OF 3

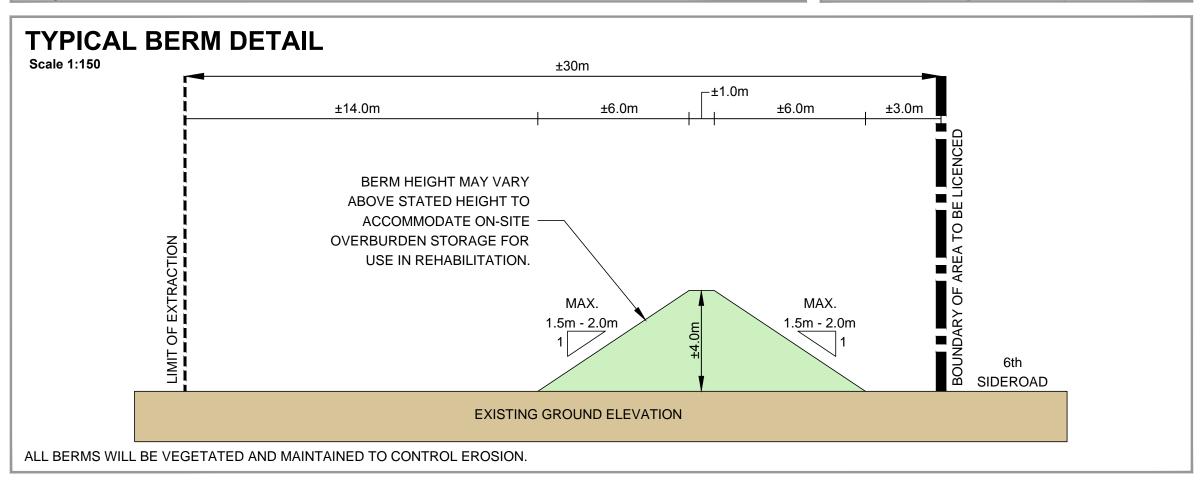
AUTHORIZED SIGNATURE:

N:\Y537K - Conn Pit Due Diligence/Drawings/ARA Site Plans/CAD/Y537K\_ExistingFeatures\_2016-01-22.dwg









### NOTES:

THE NUMBERING SEQUENCE USED FOR OPERATIONAL NOTES REFERS TO AGGREGATE RESOURCES ACT PROVINCIAL STANDARDS FOR A CLASS 'A' (CATEGORY 1) LICENCE APPLICATION.

- 1.2.1 THE DIRECTION OF EXTRACTION WILL PROCEED IN A WEST TO EAST DIRECTION AND WILL OCCUR IN THREE PHASES. FOLLOWING EXTRACTION OF THE ABOVE WATER RESERVES, THE BELOW WATER RESERVES IN THE PRECEDING PHASE WILL BE REMOVED ALLOWING BOTH FACES TO ADVANCE CONCURRENTLY AND BLENDING OF RESERVES BETWEEN ABOVE AND BELOW WATER. ALONG THE NORTH BOUNDARY ON THE PIT FLOOR ADJACENT TO THE REHABILITATED SIDE SLOPES AN INTERNAL HAUL ROUTE WILL REMAIN TO TRANSPORT THE MATERIAL BACK TO THE EXISTING PIT (LICENCE NO. 4945) FOR SHIPPING. THIS HAUL ROUTE WILL BE REHABILITATED ONCE EXTRACTION OPERATIONS ARE COMPLETE. REHABILITATION WILL BE PROGRESSIVE GENERALLY IN ACCORDANCE WITH THE DIRECTION OF EXTRACTION SHOWN ON THE 'OPERATIONS SCHEMATIC'. ANY MAJOR DEVIATION FROM THE DIRECTION OF EXTRACTION WILL REQUIRE THE APPROVAL OF MNRF.
- 1.2.2 WITHIN THE LIMIT OF EXTRACTION, THE SITE WILL BE STRIPPED OF TOPSOIL AND SUBSOIL.
  TOPSOIL AND SUBSOIL REMOVED FROM AREAS EXTRACTED WILL BE USED FOR BERM
  CONSTRUCTION, STORED AND/OR USED DIRECTLY IN REHABILITATION OF THIS SITE OR THE
  ADJACENT LICENCE NO. 4945. WHERE THERE IS A DISTINGUISHABLE LAYER, THE TOPSOIL WILL BE
  STRIPPED, HANDLED AND REPLACED AS A SEPARATE LAYER.
- 1.2.3 EXTRACTION WILL OCCUR UP TO TWO LIFTS. THE FIRST LIFT WILL BE ABOVE WATER EXTRACTION AND THE SECOND LIFT WILL BE BELOW WATER EXTRACTION WITH A MAXIMUM FACE OR HEIGHT OF ±10 M AND WILL NOT EXCEED MINISTRY OF LABOUR REQUIREMENTS.
- 1.2.4 MATERIAL WILL BE TRANSFERRED FROM THE PIT VIA INTERNAL HAUL ROUTES TO ADJACENT LICENCE NO. 4945 FOR SHIPPING. THE LOCATION OF INTERNAL HAUL ROUTES WILL VARY BASED ON THE LOCATION OF THE PIT FACE.
- 1.2.5 ACCESS TO AND FROM THE SITE WILL BE FROM THE EXISTING LICENCE NO. 4945. ACCESS BETWEEN THE SITE AND THE EXISTING LICENCE NO. 4945 CAN OCCUR ANYWHERE ALONG THE COMMON LICENCE BOUNDARY.
- 1.2.6 THE WATER TABLE ELEVATION ON THIS PROPERTY RANGES FROM +/-496 M.A.S.L. TO +/-500 M.A.S.L.
  1.2.7 NO WATER DIVERSION IS PROPOSED. GRADING OF THE SIDESLOPES AND PIT FLOOR WILL OCCUR
- TO CREATE DRAINAGE ACROSS THE SITE ALLOWING THE SURFACE DRAINAGE TO PERCOLATE THROUGH THE PIT FLOOR OR COLLECT IN THE ONSITE POND.
- 1.2.8 THE LICENCED BOUNDARY WILL BE FENCED WITH 1.2 METRE PAGE AND WIRE FENCE EXCEPT NO FENCE WILL BE REQUIRED ALONG THE COMMON BOUNDARY WITH LICENCE NO. 4945. FENCING WILL BE INSTALLED PRIOR TO THE COMMENCEMENT OF OPERATIONS (SEE SITE PLAN OVERRIDES 1.2.25 (SEC. 5.1) THIS PAGE).
- 1.2.9 NO PERMANENT BUILDINGS OR STRUCTURES ASSOCIATED WITH THE AGGREGATE OPERATIONS ARE TO BE ERECTED ON-SITE.
- 1.2.10 BERMS WILL BE CONSTRUCTED WITH TOPSOIL AND OVERBURDEN MATERIAL IN ACCORDANCE WITH THE BERM DETAIL (SEE TYPICAL BERM DETAIL THIS PAGE). IF ADDITIONAL TOPSOIL AND OVERBURDEN STORAGE IS REQUIRED IT MAY ALSO OCCUR WITHIN THE EXTRACTION AREA.
- 1.2.11 AGGREGATE STOCKPILES AND RECYCLABLE MATERIAL (CONCRETE, BRICKS AND ASPHALT) MAY OCCUR WITHIN EXTRACTION AREA (SEE SITE PLAN OVERRIDES 1.2.25 (SEC. 5.13) THIS PAGE). AGGREGATE RECYCLING IS SUBJECT TO THE FOLLOWING:
- A) RECYCLABLE ASPHALT MATERIALS WILL NOT BE STOCKPILED WITHIN 30 M OF ANY WATER BODY OR MAN-MADE POND OR 2 M OF THE SURFACE OF THE ESTABLISHED WATER TABLE.
- B) ANY REBAR AND OTHER STRUCTURAL METAL MUST BE REMOVED FROM THE RECYCLED MATERIAL DURING PROCESSING AND PLACED IN A DESIGNATED SCRAP PILE ON SITE WHICH WILL BE REMOVED ON AN ON-GOING BASIS.
- C) REMOVAL OF RECYCLED AGGREGATE IS TO BE ON-GOING.
- ONCE THE AGGREGATE ON SITE HAS BEEN DEPLETED THERE WILL BE NO FURTHER IMPORTATION OF RECYCLABLE MATERIALS PERMITTED.
- E) ONCE FINAL REHABILITATION HAS BEEN COMPLETED AND APPROVED IN ACCORDANCE WITH THE SITE PLAN, ALL RECYCLING OPERATIONS MUST CEASE.
- 1.2.12 THERE WILL BE NO TEMPORARY SCRAP STORAGE LOCATED ON-SITE. SCRAP SHALL BE LOCATED WITHIN THE EXISTING LICENCE NO. 4945.
- 1.2.13 THERE WILL BE NO FUEL STORAGE LOCATED ON-SITE.
- 1.2.14 THE AREA TO BE EXTRACTED IS 10.7HA (26.5AC).
- 1.2.15 SETBACKS WILL BE AS SHOWN AND LABELLED ON THE 'OPERATIONS SCHEMATIC' (SEE SITE PLAN OVERRIDES 1.2.25 (SEC. 5.10) THIS PAGE).
- 1.2.16 THE MAXIMUM DEPTH OF EXTRACTION IS +/-495 M.A.S.L. AS INDICATED BY PROPOSED SPOT ELEVATIONS AS SHOWN ON THE 'OPERATIONS SCHEMATIC'.
- 1.2.17 A PORTABLE PROCESSING PLANT IS PERMITTED ONSITE AND SHALL NOT BE LOCATED WITHIN THIRTY METRES OF THE LICENCED BOUNDARY.
- 1.2.18/1.2.19 BERMS SHALL BE CONSTRUCTED IN THE LOCATIONS IDENTIFIED ON THE 'OPERATIONS SCHEMATIC'. BERM HEIGHT WILL BE BETWEEN ±2 M AND ±4 M. THE PROPOSED BERMS SHALL BE VEGETATED WITH A GRASS/LEGUME MIXTURE AND MAINTAINED TO CONTROL EROSION (SEE TYPICAL BERM DETAIL THIS PAGE).
- 1.2.20 EQUIPMENT ON-SITE MAY INCLUDE BUT NOT LIMITED TO PROCESSING PLANT (SCREENER/CRUSHER), FRONT END LOADERS, EXCAVATORS, TRUCKS, SCRAPERS AND BULLDOZERS. THE MAXIMUM SOUND EMISSION LEVELS (dBA) ARE INCLUDED IN THE BELOW

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EQUIPMENT TYPE	MAXIMUM SOUND EMISSION LEVEL (dBA)
FRONT END LOADER/EXCAVATOR	75 @ 15 M
PORTABLE CRUSHER AND SCREEN	90 @ 15 m
SHIPPING TRUCKS	78 @ 15 m

- 1.2.21 EXISTING VEGETATION WITHIN THE SETBACKS WILL BE MAINTAINED EXCEPT WHERE REQUIRED FOR BERM CONSTRUCTION. AN ADDITIONAL TREE PLANTING SHALL OCCUR WITHIN THE EASTERN SETBACK PRIOR TO THE REMOVAL OF THE WOODLAND. SEE OPERATION SCHEMATIC FOR LOCATION. SEE PLANTING DETAILS ON PAGE 3 OF 3.
- 1.2.22 HOURS OF OPERATION WILL BE FROM 6:00AM TO 7:00PM (MONDAY TO FRIDAY). BETWEEN 6:00AM TO 7:00AM ONLY SHIPPING IS PERMITTED. HOURS OF OPERATION FOR SATURDAYS WILL BE FROM 7:00AM TO 12:00PM AND ONLY SHIPPING IS PERMITTED. THERE WILL BE NO OPERATIONS ON SUNDAYS AND STATUTORY HOLIDAYS AS DEFINED IN ACCORDANCE WITH THE EMPLOYMENT STANDARDS ACT.
- 1.2.23 TIMBER RESOURCES WILL BE SALVAGED FOR USES SUCH AS SAW LOGS, FENCE POSTS AND FUEL WOOD WHERE APPROPRIATE. STUMPS AND BRUSH CLEARED DURING SITE PREPARATION MAY BE BURNED (SUBJECT TO NECESSARY LOCAL APPROVAL), MULCHED OR USED IN THE PROGRESSIVE REHABILITATION OF THIS SITE.
- 1.2.24 CROSS-SECTIONS ARE SHOWN ON PAGE 3 OF 3.

OPERATIONAL STANDARD	VARIATION		
5.1/5.2	FENCING AND GATES WILL NOT BE REQUIRED FOR THE COMMON BOUNDARIES WITH LICENCE NO. 4945.		
5.10	EXCAVATION SETBACK ADJACENT TO LICENCE NO. 4945 WILL BE REDUCED TO 0M.		
5.13	AGGREGATE, TOPSOIL AND OVERBURDEN CAN BE STOCKPILED AND THE PROCESSING PLANT MAY BE LOCATED WITHIN 30M OF THE LICENCE NO. 4945.		
5.16/5.17	TOPSOIL AND OVERBURDEN MAY BE MOVED BETWEEN THIS SITE AND THE ADJACENT LICENCE NO. 4945. TO PROVIDE TIMING AND EFFECTIVE PROGRESSIVE REHABILITATION OF BOTH SITES.		

1.2.26 THE MAXIMUM AMOUNT OF MATERIAL THAT MAY BE SHIPPED FROM THIS PROPERTY IN COMBINATION WITH LICENCE NO. 4945 IN ANY CALENDAR YEAR SHALL BE 150,000 TONNES.

# 1.2.7 TECHNICAL RECOMMENDATIONS

# A) ARCHAEOLOGY: 'STAGE I-II ARCHAEOLOGICAL/HERITAGE ASSESSMENT OF THE PROPOSED EDEN OAK AGGREGATES INC. GIBRALTAR PIT EXPANSION: LOCATED IN PART LOT 6, CONCESSION 4, TOWN OF THE BLUE MOUNTAIN (FORMER TOWNSHIP OF COLLINGWOOD), COUNTY OF GREY, ONTARIO' (SOURCE: YORK NORTH ARCHAEOLOGICAL SERVICES INC., FEBRUARY 13, 2009).

- i) SHOULD PREVIOUSLY UNDOCUMENTED ARCHAEOLOGICAL RESOURCES BE DISCOVERED, THE PERSON DISCOVERING THE ARCHAEOLOGICAL RESOURCES MUST CEASE ALTERNATION OF THAT AREA IMMEDIATELY. THE MINISTRY OF TOURISM, CULTURE AND SPORT SHALL BE NOTIFIED AND THE LICENSEE SHALL ENGAGE A LICENSED ARCHAEOLOGIST TO CARRY OUT ARCHAEOLOGICAL FIELDWORK, IN COMPLIANCE WITH SECTION 48 (1) OF THE ONTARIO HERITAGE ACT.
- ii) THE CEMETERIES ACT, R.S.O. 1990, c. C.4 AND THE FUNERAL, BURIAL AND CREMATION SERVICES ACT, 2002, S.O. 2002, c.33 (WHEN PROCLAIMED IN FORCE) REQUIRE THAT ANY PERSON DISCOVERING HUMAN REMAINS MUST NOTIFY THE POLICE OR CORONER AND THE REGISTRAR OF CEMETERIES AT THE MINISTRY OF CONSUMER SERVICES.

# B) HYDROGEOLOGY/HYDROLOGY: 'LEVEL 1 AND LEVEL 2 HYDROGEOLOGICAL INVESTIGATION, PROPOSED CATEGORY 1 CLASS 'A' PIT BELOW-WATER-TABLE, 223117 ONTARIO INC., PROPOSED CONN PIT EXPANSION, PART NORTH HALF LOT 6, CONCESSION 4, TOWNSHIP OF BLUE MOUNTAIN, COUNTY OF GREY' (SOURCE: MTE CONSULTANTS INC., DECEMBER 14, 2015).

- i) THERE SHALL BE NO DEWATERING OF GROUNDWATER OR SURFACE WATER FROM THE SITE.
- ii) MW1, MW2, MW3, MW4, MW5 AND MW6 AND PRIVATE WELLS RM1, RM2 AND RM3 SHALL BE MONITORED ON A MONTHLY BASIS DURING THE EXTRACTION SEASON. MONITORING OF RM1, RM2 AND RM3 IS SUBJECT TO LANDOWNER ACCESS. SEE WELL SCHEMATIC ON THIS PAGE FOR LOCATIONS OF WELLS.

- iii) IF ANY MONITORING WELLS ARE DESTROYED BY BELOW WATER TABLE EXTRACTION ACTIVITIES THE MONITORING WELL SHALL BE REPLACED AT AN APPROPRIATE LOCATION.
- iv) WATER WELL COMPLAINT PROCEDURE:
- 1) OWNERS OF DOMESTIC AND FARM WATER SUPPLIES EXPERIENCING DISRUPTION OR QUALITY PROBLEMS SHALL IMMEDIATELY NOTIFY THE LICENSEE. THE LICENSEE, UPON RECEIPT OF ANY WATER SUPPLY DISRUPTION COMPLAINT, SHALL NOTIFY THE MNRF AND THE MOECC.
- 2) SHOULD THE OWNER OF THE EXISTING DOMESTIC AND FARM WATER SUPPLIES EXPERIENCE A SIGNIFICANT DISRUPTION IN THE WATER SUPPLY OR EXPERIENCE SIGNIFICANT ADVERSE EFFECTS UPON THEIR WATER SUPPLY; AND THE BELOW WATER TABLE OPERATION AT THE PIT CANNOT OBVIOUSLY AND DEFINITIVELY BE EXCLUDED AS THE CAUSE, THE LICENSEE SHALL SUPPLY EACH AFFECTED WELL WITH A TEMPORARY WATER SUPPLY WITHIN 24 HOURS OF NOTIFICATION, AND THEREAFTER UNTIL SUCH TIME AS THE CAUSE OF THE DISTURBANCE CAN BE DETERMINED AND THE SITUATION ADDRESSED. THE LICENSEE SHALL INVESTIGATE THE CAUSE OF THE INTERFERENCE COMPLAINT AND SHALL REPORT TO MNRF, MOECC AND THE AFFECTED PARTY
- 3) IF, AFTER CONSULTATION WITH THE AFFECTED PARTY AND THE LICENSEE, MNRF AND/OR MOECC DETERMINE THAT BELOW WATER TABLE EXTRACTION AT THE PIT HAS CAUSED AN ADVERSE EFFECT AT THE WELL IN QUESTION, THE LICENSEE SHALL, AT THEIR EXPENSE, EITHER RESTORE OR REPLACE THE AFFECTED WATER SUPPLY TO ENSURE THAT HISTORIC WATER SUPPLY AND/OR WATER QUALITY ARE RESTORED.
- 4) IF MNRF AND/OR MOECC HAVE DETERMINED THAT BELOW WATER TABLE EXTRACTION AT THE PIT HAS NOT CAUSED THE ADVERSE EFFECT TO THE WELL IN QUESTION, THE LICENSEE SHALL MAINTAIN THE TEMPORARY WATER SUPPLY SUPPLIED UNDER ITEM 2 FOR AN ADDITIONAL 24 HOURS TO ALLOW THE AFFECTED PARTY TO MAKE ALTERNATIVE WATER SUPPLY ARRANGEMENTS (I.E. REPAIR THEIR PLUMBING).

### v) SPILLS PLAN:

- 1) IMMEDIATELY STOP THE SOURCE OF THE SPILL (IE. CLOSE VALVES, TURN OFF PUMPS ETC.), AND CONTAIN/RECOVER THE MATERIAL AS MUCH AS POSSIBLE. CONTACT HELP (COWORKERS, SERVICE PROVIDERS, EMERGENCY SERVICES) IF NECESSARY TO STOP AND CONTAIN THE SPILL.
- 2) CONTACT THE MOECC SPILLS ACTION CENTRE (1-800-268-6060) AND ANY OTHER REGULATORY AGENCIES AS REQUIRED (I.E. TOWNSHIP, COUNTY, CONSERVATION AUTHORITY) IN THE EVENT THAT THE SPILL HAS CAUSED OR IS LIKELY TO CAUSE AN ADVERSE EFFECT TO THE NATURAL
- 3) CONTACT SUPERVISORS AND THE PIT OWNER TO INFORM THEM OF THE OCCURRENCE.
- 4) THE PIT OWNER AND SUPERVISORS SHALL CONTINUE RECOVERY PROCEDURES TO RECOVER AS MUCH OF THE POLLUTANT AS REASONABLY POSSIBLE USING IN-HOUSE STAFF AND EQUIPMENT OR BY RETAINING THE SERVICES OF A QUALIFIED SPILL RESPONSE FIRM.
- 5) RECOVERED CONTAMINATED SOIL, WATER AND/OR RECOVERED FUEL/CHEMICALS SHALL BE SUITABLY STORED IN CONTAINERS, BINS OR ON TARPS TO PREVENT FURTHER LOSS OF CONTAMINANTS
- 6) AS SOON AS POSSIBLE AFTER A SPILL HAS OCCURRED, THE OWNER SHALL RETAIN THE SERVICES OF A QUALIFIED PERSON (I.E. REGISTERED PROFESSIONAL GEOSCIENTIST OR EXEMPTED ENGINEER) TO CONFIRM THAT IMPACTS HAVE BEEN MITIGATED AND TO COMPLETE ANY REQUIRED MONITORING FOR POTENTIAL IMPACTS OF THE SPILL.
- 7) THE RECOVERED MATERIALS (I.E. CONTAMINATED SOIL AND WATER) WILL BE DISPOSED BY THE OPERATOR TO LOCATIONS PRESCRIBED BY THE MOECC.

# C) NATURAL ENVIRONMENT: '2223117 ONTARIO INC., CONN PIT PROPOSED EXPANSION, NATURAL ENVIRONMENT LEVEL 1 & 2 TECHNICAL REPORT' (SOURCE: AECOM, DECEMBER, 2015).

- i) THE ONSITE WOODLAND WITHIN PHASE 2 SHALL NOT BE REMOVED UNTIL SITE PREPARATION IS REQUIRED FOR PHASE 2.
- ii) THE ONSITE WOODLAND WITHIN PHASE 3 SHALL NOT BE REMOVED UNTIL SITE PREPARATION IS REQUIRED FOR PHASE 3.
- iii) VEGETATION REMOVAL SHALL OCCUR BETWEEN SEPTEMBER 2 AND APRIL 14 TO AVOID BIRD NESTING PERIOD AND BAT MATERNITY/ROOSTING SEASON.
- iv) IN SPRING/SUMMER PRIOR TO THE REMOVAL OF THE WOODLAND IN PHASE 2 AND 3, BAT ACOUSTIC MONITORING SHALL TAKE PLACE IN THE EVENING TO DETERMINE IF ENDANGERED AND THREATENED SPECIES ARE PRESENT. IF THEY ARE PRESENT MNRF WILL BE NOTIFIED AND THE LICENSEE SHALL COMPLY WITH THE ENDANGERED SPECIES ACT
- v) PRIOR TO REMOVAL OF THE WOODLAND IN PHASE 2 THE AREA OF THE EASTERN SETBACK AS SHOWN ON THE OPERATIONS SCHEMATIC SHALL BE PLANTED. SEE PLANTING DETAIL ON PAGE 3 OF 3.
- vi) PRIOR TO REMOVAL OF ONSITE BUTTERNUTS (SEE PAGE 1 OF 3) THE LICENSEE SHALL COMPLY WITH REGULATION 242/08 OF THE ENDANGERED SPECIES ACT. BUTTERNUT PLANTINGS SHALL OCCUR WITHIN THE 30 M SETBACK ON THE EAST BOUNDARY. SEE PLANTING DETAIL ON PAGE 3
- vii) THE REMAINING SETBACKS (NORTH AND SOUTH) AND SIDE SLOPES ADJACENT TO THE POND SHALL BE PLANTED WITH A MIX OF NATIVE TREES AND SHRUB SPECIES APPROPRIATE TO THE SITE CONDITIONS. SEE PLANTING DETAIL ON PAGE 3 OF 3.
- viii) MAINTAIN EXISTING VEGETATION WITHIN THE PRESCRIBED SETBACKS EXCEPT WHERE THE BERM IS REQUIRED ALONG THE NORTH BOUNDARY.
- ix) IN PHASES 2 AND 3 IN AREAS IMMEDIATELY ADJACENT TO THE WOODLOT THAT WILL BE REMOVED, AN APPROPRIATE EDGE MANAGEMENT PLAN WILL BE PREPARED BY A QUALIFIED
- x) PRIOR TO REMOVAL OF THE WOODLAND, NATIVE NON-INVASIVE GROUND FLORA AND SOIL FROM
- THE FOREST FLOOR SHALL BE SALVAGED AND MOVED INTO THE PLANTING AREAS.

  xi) SURFACE DRAINAGE FROM ANY DISTURBED AREAS SHALL BE DIRECTED INTO THE PIT.
- xii) THERE SHALL BE NO DEWATERING OR DISCHARGE OF SURFACE WATER.

ECOLOGIST AND IMPLEMENTED PRIOR TO TREE REMOVAL.

xiii) ALL BERMS SHALL BE GRADED TO A MAXIMUM OF 2:1 SLOPES. BERMS AND ALL AREAS PROGRESSIVELY REHABILITATED SHALL BE VEGETATED WITH A PERENNIAL NATIVE GRASS MIXTURE (THAT SHOULD INCLUDE SAND BARREN AND TALL GRASS PRAIRIE PLANT SPECIES) PLANTED IN THE FALL OR SPRING SEASON AND SHALL BE MAINTAINED AND RESEEDED UNTIL SELF-SUSTAINING COVER IS ESTABLISHED.

# D) NOISE: 'NOISE IMPACT ANALYSIS, CONN PIT, PROPOSED PIT EXTENSION, TOWNSHIP OF THE BLUE MOUNTAINS, GREY COUNTY' (SOURCE: VALCOUSTICS CANADA LTD., DECEMBER 23, 2015).

- i) THE SOUND EMISSION LEVEL FOR ALL PIECES OF EQUIPMENT USED FOR CONSTRUCTION ACTIVITIES INCLUDING SITE PREPARATION AND REHABILITATION SHALL COMPLY WITH THE LIMITS OUTLINED IN MOECC PUBLICATION NPC-115, "CONSTRUCTION EQUIPMENT".
- ii) THE LICENSEE'S ONSITE EQUIPMENT (FRONT END LOADER AND EXCAVATOR) SHALL USE LOW FREQUENCY/BROADBAND BACKUP ALARMS.
   iii) SOUND BARRIERS SHALL BE CONSTRUCTED AS SHOWN ON THE OPERATIONS SCHEMATIC (PAGE)
- 2 OF 3).
- iv) THE LICENSEE SHALL INSTALL 4.0 M STOCKPILES ON THE NORTH AND WEST SIDE OF THE PROCESSING AREA
- v) THE EXISTING NORTH AND WEST BERMS AT LICENSE NO. 4945 SHALL BE MAINTAINED FOR THE DURATION OF EXTRACTION AT THE SITE.
- vi) THE PIT CAN OPERATE MONDAY TO FRIDAY DURING THE DAYTIME (0700 TO 1900 HOURS) PERIOD. LOADING AND SHIPPING CAN OCCUR BETWEEN 0600 AND 1900 HOURS. ON SATURDAYS SHIPPING CAN OCCUR BETWEEN 0700 AND 1200 HOURS.
- vii) CONSTRUCTION ACTIVITIES, INCLUDING STRIPPING AND REHABILITATION, SHALL ONLY OCCUR DURING THE DAYTIME PERIOD (0700 TO 1900 HOURS) ON MONDAY TO FRIDAY. THERE SHALL BE NO CONSTRUCTION ON WEEKENDS OR STATUTORY HOLIDAYS.
- viii) AN OFFSITE NOISE AUDIT MEASUREMENT SHALL BE COMPLETED WHEN THE SITE OPERATION COMMENCES TO CONFIRM THE MOECC NOISE GUIDELINES ARE MET. THE AUDIT MEASUREMENTS MUST BE DONE BY A QUALIFIED ACOUSTICAL ENGINEER.
- ix) PIT EQUIPMENT SHALL SATISFY THE REFERENCED SOUND POWER LEVELS LISTED IN NOTE 1.2.20 OF THIS PAGE.
- THE MAXIMUM AMOUNT OF EQUIPMENT TO BE USED ON THE SITE FOR AGGREGATE EXTRACTION, PROCESSING AND SHIPPING SHALL BE THREE FRONT END LOADERS OR EXCAVATORS AND A PORTABLE PROCESSING CRUSHING AND SCREENING PLANT.
- xi) IF OTHER OR NEW EQUIPMENT IS BROUGHT TO THE SITE, THE SOUND EMISSIONS BE CHECKED TO ENSURE THE EQUIPMENT IS IN COMPLIANCE WITH SOUND POWER LEVELS LISTED IN NOTE
- 1.2.20 OF THIS PAGE.

  xii) IF ALTERNATE NOISE MITIGATION MEASURES ARE TO BE IMPLEMENTED, THEY SHALL BE
- REVIEWED BY A QUALIFIED ACOUSTICAL CONSULTANT TO ENSURE THE MOECC NOISE GUIDELINE

# E) TRAFFIC: '2223117 ONTARIO INC., TRAFFIC IMPACT STUDY, THE CONN PIT EXPANSION, TOWN OF COLLINGWOOD, PROJECT NO. TR15-0588' (SOURCE: COLE ENGINEERING GROUP LTD., DATED DECEMBER 2015).

- i) THE SITE SHALL UTILIZE THE EXISTING ENTRANCE/EXIT ON LICENSE NO. 4945.
- ii) THE SITE IS PERMITTED TO SHIP A MAXIMUM OF 150,000 TONNES OF MATERIAL PER ANNUM IN COMBINATION WITH LICENSE NO. 4945.

### Legal Description

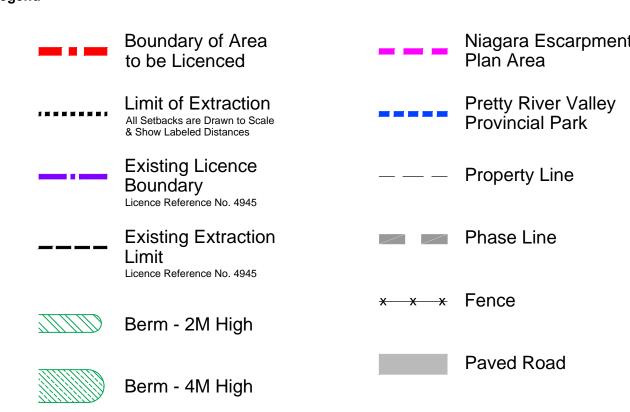
RP 16R9097 PART 1, NORTH PART LOT 6, CONCESSION 4 TOWN OF THE BLUE MOUNTAINS, COUNTY OF GREY

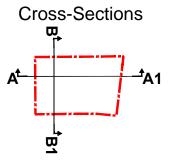
Proposed Pit

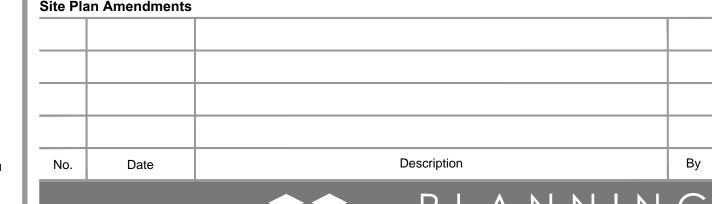
Floor Elevation

Metres Above Mean Sea Leve

### Legend

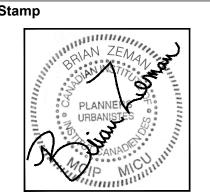


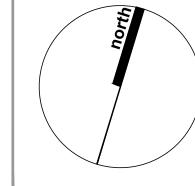






MNRF Approval Stamp





LICENSEE: 2223117 ONTARIO INC.

AUTHORIZED SIGNATURE:

Project

# **CONN PIT EXTENSION**

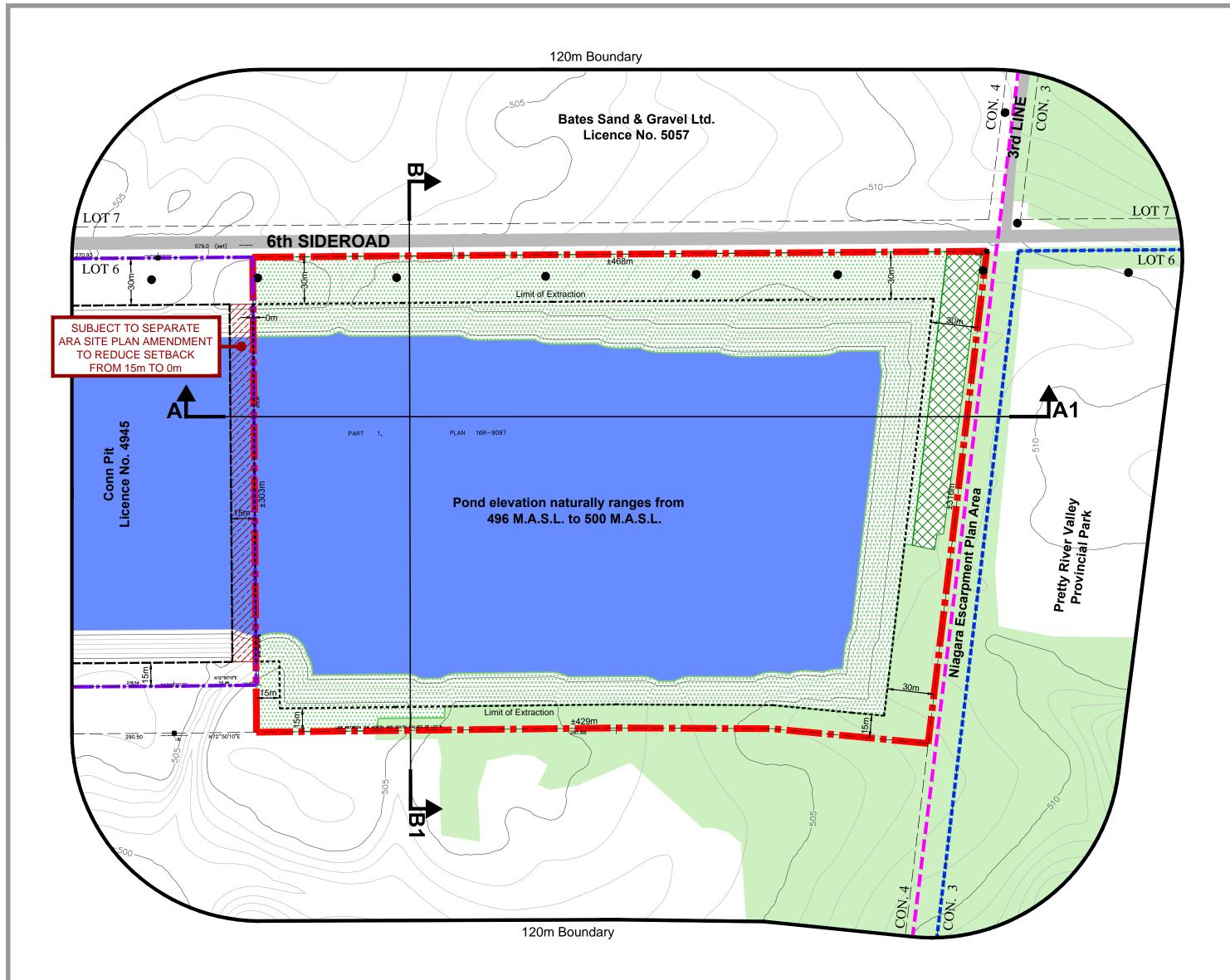
2223117 ONTARIO INC. 1443 HURONTARIO STREET MISSISSAUGA, ONTARIO, L5G 3H5

MNRF Licence Reference No.	Pre-approval review:		
	First Submission to MNRF, December 23, 2015 Second Submission to MNRF, January 22, 2016		
Plan Scale 1:2000 (Arch D)	Plot Scale 1:1 (Arch D)		
Metres	Drawn By M.M. File No.		
0 25 50 100	Checked By B.Z.		

OPERATION PLAN

Drawing No. 2 OF 3

N:\Y537K - Conn Pit Due Diligence/Drawings/ARA Site Plans/CAD/Y537K\_OperationPlan\_2016-01-22.dwg



- 1. AREA TO BE REHABILITATED ±12.7ha (±31.4ac). THIS INCLUDES THE AREA TO BE EXTRACTED AS A PLANTINGS WITHIN SETBACK AREAS WELL AS PORTIONS OF THE SETBACK TO BE REHABILITATED.
- 2. ALL MEASUREMENTS SHOWN ON THIS PLAN ARE IN METRES.
- 3. NUMBERING SEQUENCE USED FOR REHABILITATION NOTES REFERS TO AGGREGATE RESOURCES ACT PROVINCIAL STANDARDS FOR A CLASS 'A' (CATEGORY 1) LICENCE APPLICATION.
- 1.3.1 PROGRESSIVE REHABILITATION WILL PROCEED IN A WEST TO EAST DIRECTION. REHABILITATION WILL OCCUR AS LIMITS OF EXTRACTION ARE REACHED AND THE RESOURCE IS DEPLETED. WHEN EXTRACTION COMMENCES IN PHASE 2 REHABILITATED SIDE SLOPES IN PHASE 1 SHALL BE COMPLETED. WHEN EXTRACTION COMMENCES IN PHASE 3 REHABILITATED SIDE SLOPES IN PHASE 2 SHALL BE COMPLETED. ALONG THE NORTH BOUNDARY ON THE PIT FLOOR ADJACENT TO THE REHABILITATED SIDE SLOPES AN INTERNAL HAUL ROUTE WILL REMAIN TO TRANSPORT THE MATERIAL BACK TO THE EXISTING PIT (LICENCE NO. 4945) FOR SHIPPING. THIS HAUL ROUTE WILL BE REHABILITATED ONCE EXTRACTION OPERATIONS ARE COMPLETE.
- 1.3.2 THE AREA WILL BE STRIPPED OF TOPSOIL AND SUBSOIL IN STAGES. WHERE THERE IS A DISTINGUISHABLE LAYER, ALL SOILS WILL BE STRIPPED, HANDLED AND REPLACED AS A SEPARATE LAYER. WHEREVER POSSIBLE, TOPSOIL WILL BE MOVED DIRECTLY TO A REHABILITATION LOCATION. ALL SUBSOIL WILL BE RETAINED AND USED IN REHABILITATION OF THIS SITE OR THE ADJACENT LICENCE NO. 4945. (SEE OVERRIDE 5.16 / 5.17).
- 1.3.3 / 1.4.3 THE REHABILITATION OBJECTIVE FOR THIS SITE IS TO PROVIDE A POND (59%) AND FORESTED SIDE SLOPES AND WOODLAND CONDITIONS (41%). FOR DETAILS REGARDING PLANTINGS, SEE PLANTING DETAILS ON THIS PAGE.
- 1.3.4 / 1.4.2 SIDE SLOPES WILL BE NO STEEPER THAN 3:1 AND WILL BE ESTABLISHED BY CUT/FILL AND/OR BACKFILLING METHODS USING ON-SITE OR MATERIAL FROM ADJOINING SITES AS PER OVERRIDE 5.16 / 5.17 (SEE PAGE 2 OF 3). THE FINAL LANDFORM SHOWN REPRESENTS THE MAXIMUM EXTENT OF EXTRACTION AND MAY BE REDUCED IF MARKETABLE RESOURCES ARE NOT ENCOUNTERED.
- 1.3.5 PROGRESSIVE REHABILITATION WILL BE ONGOING AND WILL FOLLOW A WEST TO EAST SEQUENCE AS STRIPPING AND EXTRACTION PROGRESSES. WHEN EXTRACTION COMMENCES IN PHASE 2 REHABILITATED SIDE SLOPES IN PHASE 1 SHALL BE COMPLETED WHEN EXTRACTION COMMENCES IN PHASE 3 REHABILITATED SIDE SLOPES IN PHASE 2 SHALL BE COMPLETED. ALONG THE NORTH BOUNDARY ON THE PIT FLOOR ADJACENT TO THE REHABILITATED SIDE SLOPES AN INTERNAL HAUL ROUTE WILL REMAIN TO TRANSPORT THE MATERIAL BACK TO THE EXISTING PIT (LICENCE NO. 4945) FOR SHIPPING. THIS HAUL ROUTE WILL BE REHABILITATED ONCE EXTRACTION OPERATIONS ARE COMPLETE. SIDE SLOPE AND PIT FLOOR AREAS NOT BEING UTILIZED AS PART OF ACTIVE OPERATIONS WHERE EXTRACTION HAS BEEN COMPLETED WILL BE PROGRESSIVELY REHABILITATED.
- 1.3.6 / 1.4.1 CLEAN INERT FILL MAY NOT BE IMPORTED.
- 1.4.4 NO BUILDINGS OR STRUCTURES ARE PROPOSED TO REMAIN ON SITE.
- 1.4.5 THE FINAL POND ELEVATION WILL VARY BETWEEN 496 M.A.S.L. AND 500 M.A.S.L. BASED ON NATURAL VARIABILITY.
- 1.4.6 NO INTERNAL HAUL ROUTES WILL REMAIN ON SITE FOLLOWING FINAL REHABILITATION. DURING PROGRESSIVE REHABILITATION AN INTERNAL HAUL ROUTE WILL BE MAINTAINED ONSITE TO TRANSFER MATERIAL TO THE EXISTING OPERATION FOR SHIPPING.
- 1.4.7 THE SURFACE DRAINAGE WITHIN THE EXTRACTION LIMIT WILL REMAIN ON SITE AND BE DIRECTED TO THE ONSITE POND.
- 1.4.8 FINAL ELEVATIONS OF THE REHABILITATED AREA SHOWN ON THIS PAGE.

┌15m SETBACK

-15m SETBACK

⊤ 515 m.a.s.l.

490 m.a.s.l.

515 m.a.s.l.

490 m.a.s.l.

### PLANTING DETAILS:

- i) PRIOR TO EXTRACTION IN PHASE 2, THE PORTION OF THE EAST SETBACK AS SHOWN ON THE OPERATIONS SCHEMATIC SHALL BE PLANTED IN ACCORDANCE WITH SECTION B OF THIS
- ii) FOLLOWING EXTRACTION AND REMOVAL OF THE BERM THE NORTH AND SOUTH SETBACK AREAS SHALL BE PLANTED IN ACCORDANCE WITH SECTION B OF THIS PAGE.

### B RECOMMENDATIONS FOR PLANTINGS WITHIN SETBACK AREAS

- TREES SHALL BE SPACED AT APPROXIMATELY 4 M OFF CENTRE LINE, STAGGERED. THE TREE ARRANGEMENT SHALL BE VARIABLE AND NOT IN ROWS, TO MIMIC A NATURAL
- ii) TREE SPECIES SHALL BE RANDOMLY MIXED BUT OFTEN ARRANGED INTO SINGLE SPECIES GROUPINGS.
- iii) SHRUB PLANTINGS SHALL BE ARRANGED IN RANDOM CLUMPS. PLANTED AS CLOSE AS 1 M OFF CENTRE LINE IN PATCHES BUT NOT UNIFORMLY SPREAD THROUGH TREE PLANTING
- iv) SPECIES AND PERCENTAGES CAN BE ADJUSTED DEPENDING ON AVAILABILITY AND SURVIVORSHIP BASED ON MONITORING.
- v) SEEDLINGS OR SAPLINGS ARE BEST PLANTED IN SPRING OR AUTUMN.
- vi) PLANT MATERIAL CAN BE BARE ROOT IF PLANTED BEFORE LEAF OUT (APRIL TO MID MAY, OR OCTOBER TO NOVEMBER) BUT SHOULD BE POTTED OR B&B IF PLANTED WHEN LEAFED OUT (MID MAY TO LATE SEPTEMBER).
- vii) PLANT MATERIAL SHALL BE WATERED IMMEDIATELY AFTER PLANTING AND MONTHLY AFTER DURING THE FIRST GROWING SEASON.
- viii) PLANT MATERIAL SHALL BE INSPECTED ANNUALLY FOR SURVIVAL FOR THE FIRST THREE YEARS. PLANTS SHALL BE REPLACED IF THERE IS LESS THAN 70% SURVIVAL.
- ix) TREE GUARDS SHALL BE PLACED ON STEMS OF PLANTS TO REDUCE MAMMAL BROWSING.
- x) TREE STAKES SHALL NOT BE USED.
- xi) TREES RECOMMENDED FOR PLANTING INCLUDE:
  - WHITE PINE (PINUS STROBUS): 20% • RED PINE (PINUS RESINOSA): 5%
- SUGAR MAPLE (ACER SACCHARUM): 20% • RED OAK (QUERCUS RUBRA): 10%
- BUR OAK (QUERCUS MACROCARPA): 5% • BIG-TOOTHED ASPEN (POPULUS GRANDIDENTATA): 10% AMERICAN BASSWOOD ( TILIA AMERICANA): 10%
- AMERICAN BEECH (FAGUS GRANDIFOLIA): 5% • BLACK CHERRY (PRUNUS SEROTINA): 5%
- IRONWOOD (OSTRYA VIRGINIANA): 5%
- BUTTERNUT (JUGLANS CINEREA): 20 SEEDLINGS WITHIN EASTERN SETBACK ONLY

### xii) SHRUBS RECOMMENDED FOR PLANTING INCLUDE:

- CHOKE CHERRY (PRUNUS VIRGINIANUS): 20%
- BUSH HONEYSUCKLE ( DIERVILLA LONICERA ): 20% • ALTERNATE-LEAVED DOGWOOD ( CORNUS ALTERNIFOLIA ): 20%
- ROUND-LEAVED DOGWOOD ( CORNUS RUGOSA): 10% BEAKED HAZEL (CORYLUS CORNUTA): 10%
- RED-BERRIED ELDER (SAMBUCUS RACEMOSA): 10% • DOWNY ARROWWOOD ( VIBURNUM RAFINESQUIANUM ): 10 %

# C PLANTINGS FOR SIDE SLOPE AREAS

i) FOLLOWING EXTRACTION THE SIDE SLOPES SHALL BE PLANTED IN ACCORDANCE WITH SECTION D OF THIS PAGE.

## D RECOMMENDATIONS FOR PLANTINGS FOR SIDE SLOPE AREAS

- i) TOPSOIL LAYER OF AT LEAST 30 CM DEEP SHALL BE PLACED OVER ALL PLANTED TREES.
- ii) TREES SHALL BE SPACED AT APPROXIMATELY 4 M OFF CENTRE LINE, STAGGERED. THE TREE ARRANGEMENT SHOULD BE VARIABLE AND NOT IN ROWS, TO MIMIC A NATURAL
- iii) TREE SPECIES SHALL BE RANDOMLY MIXED BUT OFTEN ARRANGED INTO SINGLE SPECIES
- iv) SHRUB PLANTINGS SHALL BE ARRANGED IN RANDOM CLUMPS. PLANTED AS CLOSE AS 1 M OFF CENTRE LINE IN PATCHES BUT NOT UNIFORMLY SPREAD THROUGH TREE PLANTING
- v) SPECIES AND PERCENTAGES CAN BE ADJUSTED DEPENDING ON AVAILABILITY AND SURVIVORSHIP BASED ON MONITORING.
- vi) SEEDLINGS OR SAPLINGS ARE BEST PLANTED IN SPRING OR AUTUMN.
- vii) PLANT MATERIAL CAN BE BARE ROOT IF PLANTED BEFORE LEAF OUT (APRIL TO MID MAY, OR OCTOBER TO NOVEMBER) BUT SHOULD BE POTTED OR B&B IF PLANTED WHEN LEAFED OUT (MID MAY TO LATE SEPTEMBER).
- viii) PLANT MATERIAL SHALL BE WATERED IMMEDIATELY AFTER PLANTING AND MONTHLY DURING THE FIRST GROWING SEASON.
- ix) PLANT MATERIAL SHALL BE INSPECTED ANNUALLY FOR SURVIVAL FOR THE FIRST THREE YEARS. PLANTS SHALL BE REPLACED IF THERE IS LESS THAN 70% SURVIVAL.
- x) TREE GUARDS SHALL BE PLACED ON STEMS OF PLANTS TO REDUCE MAMMAL BROWSING.
- xi) TREE STAKES SHALL NOT BE USED.

# xii) TREES RECOMMENDED FOR PLANTING INCLUDE:

- WHITE PINE (PINUS STROBUS): 20%
- RED PINE (PINUS RESINOSA): 5% WHITE SPRUCE (PICEA GLAUCA): 5% • EASTERN RED CEDAR (JUNIPERUS VIRGINIANUS): 5%
- RED MAPLE (ACER RUBRUM): 20%
- RED OAK (QUERCUS RUBRA): 20% • BIG-TOOTHED ASPEN (POPULUS GRANDIDENTATA): 10%
- TREMBLING ASPEN (POPULUS TREMULOIDES): 10% • PIN CHERRY (PRUNUS PENNSYLVANICA): 5%

# xiii) SHRUBS RECOMMENDED FOR PLANTING INCLUDE:

- BUSH HONEYSUCKLE ( DIERVILLA LONICERA ): 20%
- ROUND-LEAVED DOGWOOD ( CORNUS RUGOSA): 20% • STAGHORN SUMAC (RHUS HIRTA): 20%
- DOWNY ARROWWOOD ( VIBURNUM RAFINESQUIANUM ): 20 % • BUFFALO-BERRY (SHEPHERDIA CANADENSIS): 10%
- COMMON JUNIPER (JUNIPERUS COMMUNIS): 10%

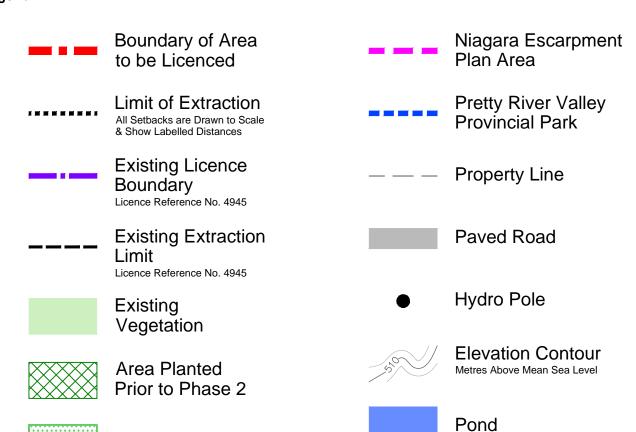
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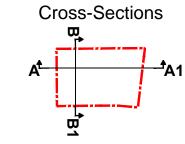
COUNTY OF GREY

RP 16R9097 PART 1. NORTH PART LOT 6, CONCESSION 4 TOWN OF THE BLUE MOUNTAINS,

Woodland

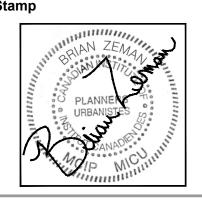
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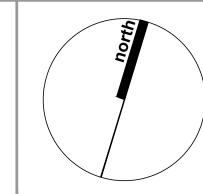






**MNRF Approval Stamp** 





LICENSEE: 2223117 ONTARIO INC. AUTHORIZED SIGNATURE:

**Project** 

# **CONN PIT EXTENSION**

2223117 ONTARIO INC. 1443 HURONTARIO STREET MISSISSAUGA, ONTARIO, L5G 3H5

MNRF Licence Reference No.	Pre-approval review: First Submission to MNRF, December 23, 2015 Second Submission to MNRF, January 22, 2016  Plot Scale 1:1 (Arch D)		
Plan Scale 1:2000 (Arch D)			
Metres	Drawn By M.M. File No.		
0 25 50 100	Checked By B.Z. Y537K		

**REHABILITATION PLAN** 

Drawing No. 3 OF 3

N:\Y537K - Conn Pit Due Diligence/Drawings/ARA Site Plans/CAD/Y537K\_RehabPlan\_2016-01-22.dwg

